

## Anti-IFN-beta IFNB1 Antibody

Catalog Number: A02041-1

### About IFNB1

Type I Interferons (IFN-alpha/beta) are produced primarily in response to viral infection by "Natural IFN-producing cells" (NPCs) as part of the host immune response and can also inhibit the development of tumors. IFN-beta binding by its receptor results in the activation of the tyrosine kinases Jak1 and Tyk2 and phosphorylation of members of the STAT family of transcription factors, leading to the transcription and expression of the immune response genes. More recently, several members of the toll-like receptor (TLR) family were found to stimulate the production IFN-beta. IFN-beta is currently used clinically for treatment of tumors, infections and multiple sclerosis.

### Overview

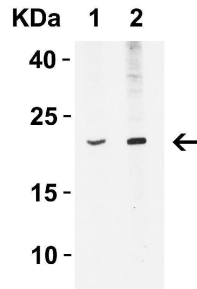
Product Name	Anti-IFN-beta IFNB1 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-IFN-beta IFNB1 Antibody (Catalog # A02041-1). Tested in ELISA, WB, IHC-P, IF applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, IF, IHC-P, WB
Clonality	Polyclonal
Formulation	IFN-beta Antibody is supplied in PBS containing 0.02% sodium azide.
Storage Instructions	IFN-beta antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Host	Rabbit
Uniprot ID	P01574

### Technical Details

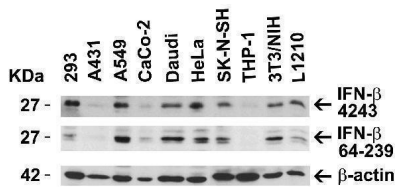
Immunogen	Anti-IFN-beta antibody was raised against a peptide corresponding to 17 amino acids near the center of human IFN-beta. The immunogen is located within amino acids 110-160 of IFN-beta.
Predicted Reactive Species	Bovine, Chicken
Isotype	IgG
Form	Liquid
Concentration	1 mg/mL
Purification	IFN-beta Antibody is affinity chromatography purified via peptide column.
Suggested Dilutions	WB: 4-10 ug/mL; IHC: 2.5 ug/mL; IF: 20 ug/mL. Antibody validated: Western Blot in human, mouse and rat samples; Immunohistochemistry in

human samples; Immunofluorescence in human and mouse samples. All other applications and species not yet tested. Optimal dilutions for each application should be determined by the researcher.

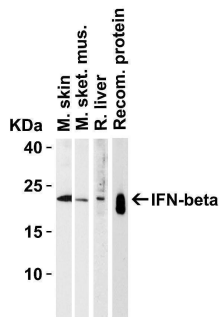
## Anti-IFN-beta IFNB1 Antibody (A02041-1) Images



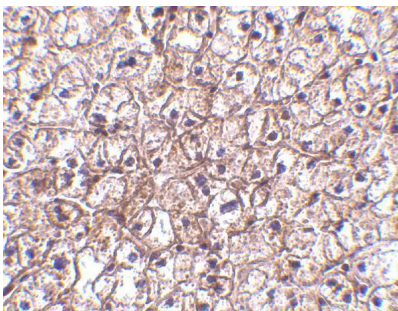
Western Blot Validation in Mouse A20 Cell Lysate Loading: 15 ug of lysates per lane. Antibodies: IFN-beta A02041-1 (Lane 1: 5 ug/mL and Lane 2: 10 ug/mL), 1h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



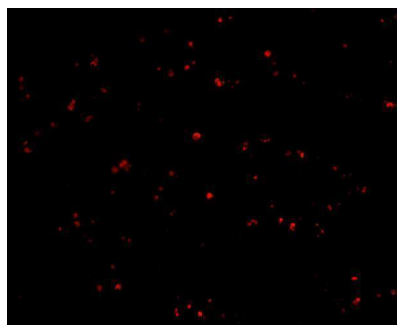
Independent Antibody Validation (IAV) via Protein Expression Profile in Human and Mouse Cell Lines Loading: 15 ug of lysates per lane. Antibodies: IFN-beta A02041-1 (4 ug/mL), IFN-beta 64-239, (5 ug/mL) and beta-actin 3779 (1 ug/mL), 1h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



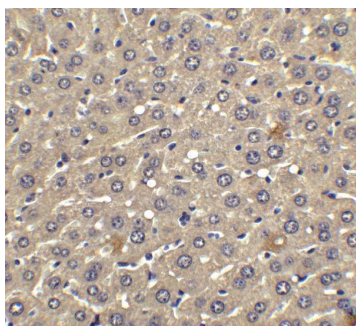
Western Blot Validation in Multiple Tissues and Recombinant Protein Loading: 15 ug of lysates per lane. Antibodies: IFN-beta A02041-1 (4 ug/mL), 1h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



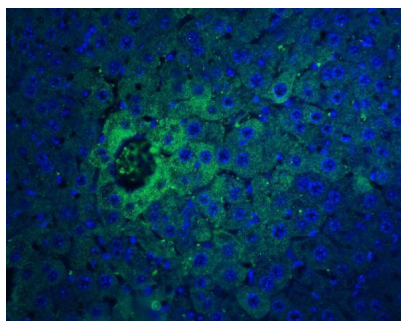
Immunohistochemistry Validation of IFN-beta in Human Liver Tissue Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-IFN-beta antibody (A02041-1) at 5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



Immunofluorescence Validation of IFN-beta in Human Liver Cells Immunofluorescent analysis of 4% paraformaldehyde-fixed human liver cells labeling IFN-beta with A02041-1 at 20 ug/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red).



**Immunohistochemistry Validation of IFN-beta in Human Liver Tissue**  
Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-IFN-beta antibody (A02041-1) at 2.5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



**Immunofluorescence Validation of IFN-beta in Mouse Liver Tissue**  
Immunofluorescent analysis of 4% paraformaldehyde-fixed mouse liver tissue labeling IFN-beta with A02041-1 at 20 ug/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (green) and DAPI staining (blue).

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### Anti-IFN-beta IFNB1 Antibody

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